ISYS90085 Interaction Design and Usability

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 3 hours per week Total Time Commitment: 200 hours
Prerequisites:	<table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>ISYS90026 Fundamentals of Information Systems</td><td>Semester 1</td><td>12.50</td></tr></table> or permission from the subject coordinator.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	<table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>SINF90002 Interaction Design and Usability</td><td>Not offered 2015</td><td>12.50</td></tr></table>
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Dr Bernd Ploderer
Contact:	Bernd Ploderer email: **ploderer@unimelb.edu.au (mailto:ploderer@unimelb.edu.au)**
Subject Overview:	**AIMS** Typically 40% of IS development costs can be attributed to user interface development. Unusable systems may necessitate longer training courses, incur higher operational costs, are ineffective in supporting business processes, are error prone and even dangerous. This subject presents students with the theory, methodology and technology relevant to the development of innovative and usable interactive information systems. **INDICATIVE CONTENT** Aspects of the following topics will be considered: # Theoretical foundations (conceptual theories, user characteristics, user models) # UI technology (human-computer dialogues and input technology) # Usability engineering (user-centred design; user needs analysis; participatory design and usability evaluation)
Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILOs)**

	Having completed this unit the student is expected to: 1 Have knowledge of the technical, cognitive and social factors that can make interactive software effective 2 Understand and be able to apply user-centred design techniques 3 Be aware of the range of design principles, techniques and methods that can assist user interface designers, and understand the limitations of such tools
Assessment:	CRITICAL REVIEW - Individual students write one critical review (500 words) of a prescribed academic paper and give a 10-minute presentation, (excluding question time) based on the critical review, due between week 3 - 11 worth 10%. Requiring approximately 13 – 15 hours of work required. ILOs 1 and 2 are addressed in this critical review. ASSIGNMENT 1 COGNITIVE WALKTHROUGH – Group project (3-4 students) on user needs analysis of a particular situation of use, design of a paper prototype and a cognitive walkthrough. The assignment consists of a written report (2000-3000 words) and a presentation (10 minutes), due in week 6 worth 20%. Requiring approximately 25-30 hours of work per student. ILOs 3 and 4 are addressed in this assignment. ASSIGNMENT 2 DESIGN AND EVALUATION – Group project (3-4 students) to create a digital prototype (based on the findings of assignment 1) and to conduct a usability evaluation of the prototype. Groups must report on the evaluation via a written report (3000-4000 words) and a presentation (10 minutes), due in week 12 worth 30%. Requiring approximately 35-40 hours of work per student. ILOs 4 and 5 are addressed in this assignment. Assignment 2 is a hurdle and must be passed in order to pass the subject. EXAM - One open book, written, individual, take-home, end-of-semester examination worth 40% taken during the examination period. ILOs 1, 2 and 3 are addressed in the exam. The examination is a hurdle and must be passed in order to pass the subject.
Prescribed Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject, students should have the following skills: # Analytical and interpretative skills, from the theorising of usability to the conduct of user centered design # High-level design skills, through proposing new uses of technology to support users # Team-work, through working on a group project # Report-writing skills # Presentation skills
Notes:	**LEARNING AND TEACHING METHODS** The subject is delivered in 3-hour classes, with each class containing: lectures on theoretical concepts and tutorial work and an interactive debrief on the outcomes of the tutorial work. Outside class students will study theory and cases through reading and continuing their group activities. **INDICATIVE KEY LEARNING RESOURCES** A list of key articles will be provided on the LMS. Materials from real-world cases are provided in class. **CAREERS / INDUSTRY LINKS** This subject is relevant to careers as a usability engineer, interaction designer, information architect etc. Students will work on real-world user interface design cases. There will be one or two lectures from invited practitioners from industry.
Related Course(s):	Master of Information Systems Master of Information Systems Master of Information Systems Master of Philosophy - Engineering Master of Science (Information Systems)

	Ph.D.- Engineering
Related Majors/Minors/ Specialisations:	MIS Professional Specialisation MIS Research Specialisation MIT Spatial Specialisation